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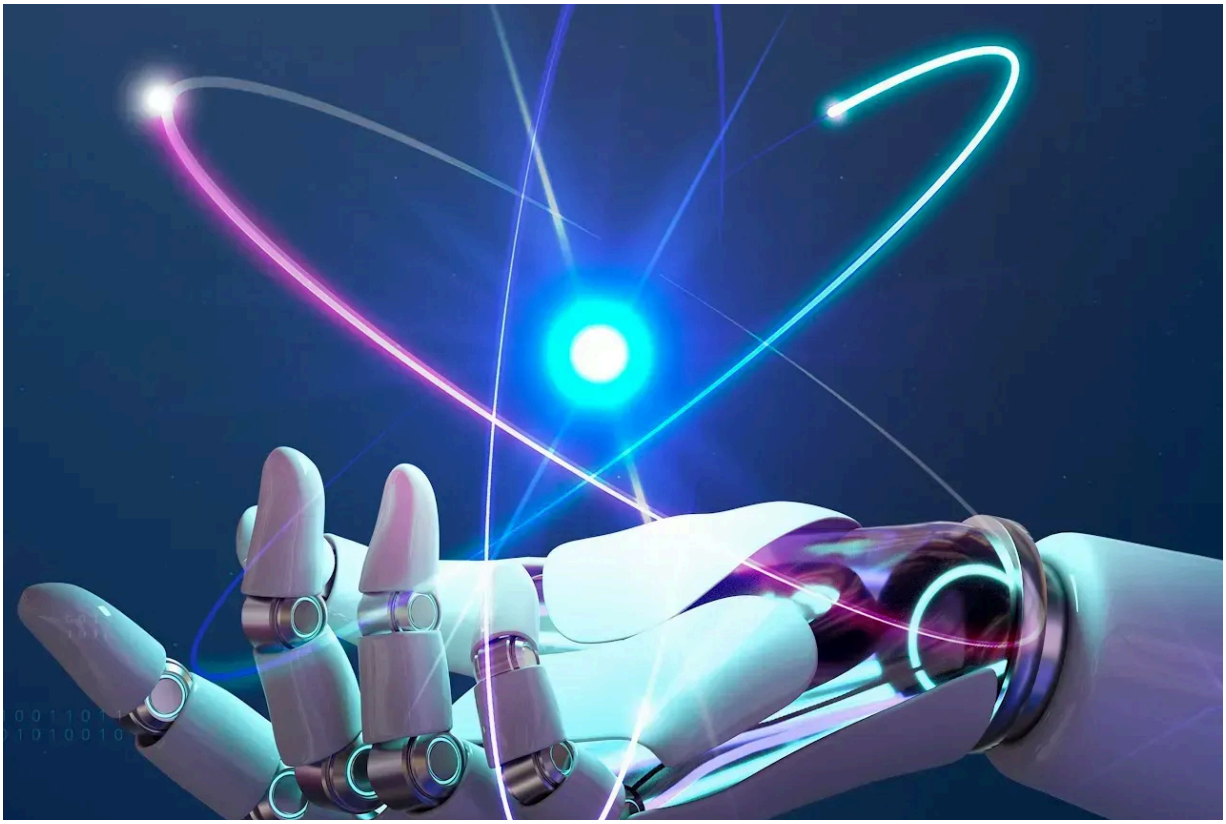
JENKS SCIENCE AND TECH TALKS

Science and Technology at the Jenks - AI talk and Superconductors

SPECIAL TO THE NEWS

July 23, 2025 . 11:00 AM — 5 min read



By Ron Latanision, John Brown, and Walter Hubbard

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In June, Marv Goldschmitt added the perspective of a technologi philosopher to *The Artificial Intelligence Revolution* and Professor Amit

Goyal spoke about *High Temperature Superconductors*

Artificial Intelligence - Wrap Up for the 2024-2025 Forum Season

On June 27, our season wrap-up, The Wilson Forum met for what may be the most urgent and far-reaching discussion yet — on artificial intelligence and the future of human society.

Generative AI, Artificial General Intelligence (AGI) and Artificial Superintelligence (ASI) represent potential societal challenges and benefits of unprecedented character derived from science and technology.

Technological philosopher Marv Goldschmitt moderated a discussion including the results of the survey that he produced which captures this spectrum. This matter is too important to let the moment go by without active response (acceptance or resistance) on the part of everyone.

The fundamental question is what happens when cognition, creativity, and agency are no longer uniquely human? The consequences of the artificial intelligence movement will affect all of us on this planet. So, we all need to be alert and informed.

The following is a link to Goldschmitt's interview with *The Bridge*, the National Academy of Engineering Quarterly publication, which appeared on June 16. This exchange adds broad perspective: NAE Website - An Interview with . . . Marv Goldschmitt, entrepreneur, AI analyst, and technological philosopher .

The recording of this meeting should serve a very useful and helpful resource going forward in informing and alerting all of us to the movement of AI and understand how and when to respond or not!

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Goldschmitt has been involved in the “bleeding” edge of the computer industry for 45 years. He brings a long history of high technology executive management and consulting experience to every engagement. He is a broad thinker who applies his skills to a variety of areas that are impacted by rapid changes in technology.

Active in the evolving areas of information privacy and data governance he started and ran the first software industry lobbying organization to combat piracy and establish protection for software IP. He was a member of IBM’s Data Governance Council leading the privacy and security policy development team.

Goldschmitt has a long interest and involvement with AI. In 1986 he worked with Nestor Inc., the first dedicated neural networking company. He was at IBM when Watson was being developed and then started a company to help job seekers combat the use of AI in resume screening.

Goldschmitt has published numerous articles on business development strategies, security and data governance. He holds a BS from the State University of New York and an MS from the Medical College of Virginia/VCU, in psychology, is a professional photographer and spent a number of years as a meditation instructor.

High Temperature Superconductors: *From Discovery to Large-Scale Industrial Applications*

On June 13, Professor Amit Goyal spoke about high-temperature superconductors? These high-tech darlings of the late 1980s brought a Nobel Prize to their discoverers and generated endless speculation about how their near perfect conduction of electricity would revolutionize the world we live in!

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A key obstacle in realizing large-scale applications of these novel materials was the difficulty of forming long, flexible wires that can carry large amounts of supercurrent per unit area, from these highly brittle, ceramic superconductors that essentially resemble “mud.”

It turns out that from a technical or performance standpoint, a mile-long, flexible, single-crystal-like wire of the highly brittle, ceramic superconductor was required. From a cost and fabrication standpoint, an industrially scalable, low-cost process was needed with the goal being to meet or beat the price of ordinary copper wire!

This constituted the first *holy-grail* in fabrication of high-performance, superconducting wires, namely, fabrication of single-crystal-like superconducting wires by the kilometer at a price/performance metric equivalent to that of copper.

Once this seemingly insurmountable objective was addressed via fundamental technical innovations, a second *holy-grail* became apparent for realizing large-scale applications where high-applied magnetic fields were present.

This related to substantially improving the vortex-pinning within the superconducting wires which could only be accomplished by introducing periodic, nanoscale, non-superconducting regions separated by nanoscale dimensions, within kilometer-long superconducting wires. Of course, all of this had to be accomplished without adding any significant cost!

In this talk Goyal of the State University of New York (SUNY) at Buffalo will take you on a journey from the discovery of high temperature superconductors towards realizing practical, large-scale, applications of these novel materials by addressing the key scientific and technical challenges mentioned above.

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The eventual solutions are one of the first, large-scale, high-technology applications of nanotechnology, the only example of "*epitaxy-by-the-mile*" and of *self-assembly of nanomaterials* by the mile!

These HTS wires are now enabling commercial nuclear fusion for limitless clean energy generation, loss-less transmission of energy, superconducting magnetic energy storage systems, next-generation MRI and NMR, MagLev for transportation and all-electric planes and ships with superconducting drivetrains for defense applications.

Dr. Amit Goyal is a SUNY Distinguished Professor and SUNY Empire Innova

UPCOMING WILSON FORUM PRESENTATIONS: The Wilson Forum will take a break in July and August and return for the 2025-2026 season on Sept. 12.

All Wilson Science & Technology Forum presentations are recorded and can be streamed free on demand at the Wilson Forum's website.

WinCAM broadcasts recordings of Forum presentations at 3 pm on Mondays and Fridays. For the schedule, go to https://wincam.org/schedule/education/ and search for "Wilson."

The Wilson Forum's meetings are via Zoom, at 10:30 a.m. on the second and fourth Fridays of each month, with the exception of July and August.

To learn of upcoming Forum speakers, you can check the Jenks Center's website https://www.jenkscenter.org/ (events > daytime > Wilson Forum).

Better yet, you can receive advance notification of upcoming tall
emailing a request to be added to the Forum's roster

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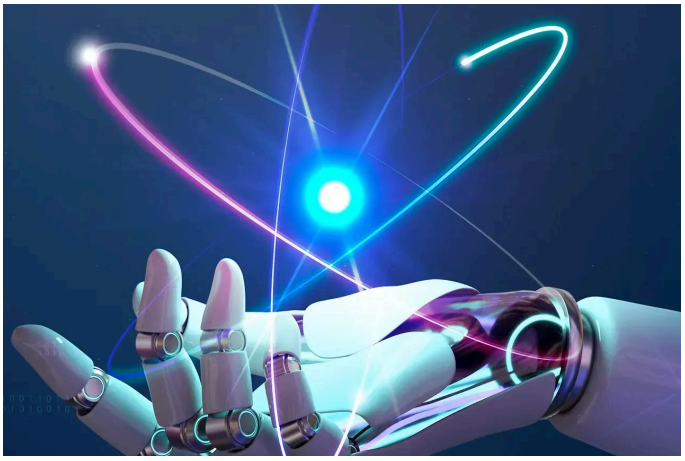
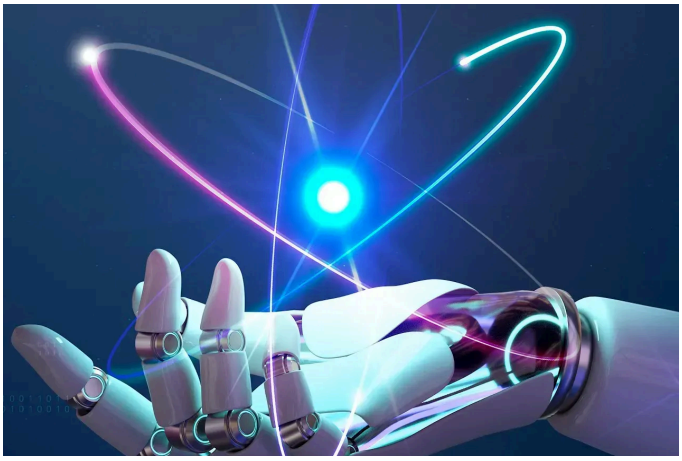


JENKS SCIENCE AND TECH TALKS

Jenks Science and Tech Talks - on truth and the purposes of government

By Ron Latanision and John Brown On November 14, author Joe Simonetta spoke about the truth, which is under siege in our contemporary world; and on November 28th Wilson Forum Historian Vincent Dixon spoke about a central debate of our time, the purposes and evolution of government. By Ron Latanision

SPECIAL TO THE NEWS
December 11, 2025



JENKS SCIENCE AND TECH TALKS

Jenks Science & Tech Talks discusses AI and spent nuclear waste

The Wilson Science & Technology Forum at The Jenks Center in Winchester By Ron Latanision and John Brown Tales from the AI Frontier On October 10, Dr. Eddie Robins spoke about the human-machine interface in the expanding presence of artificial intelligence (AI) in our lives. The rapidity with which AI

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November 15, 2025

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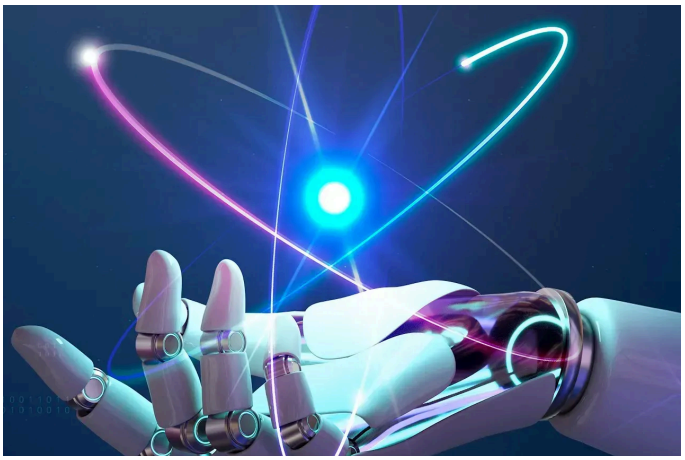
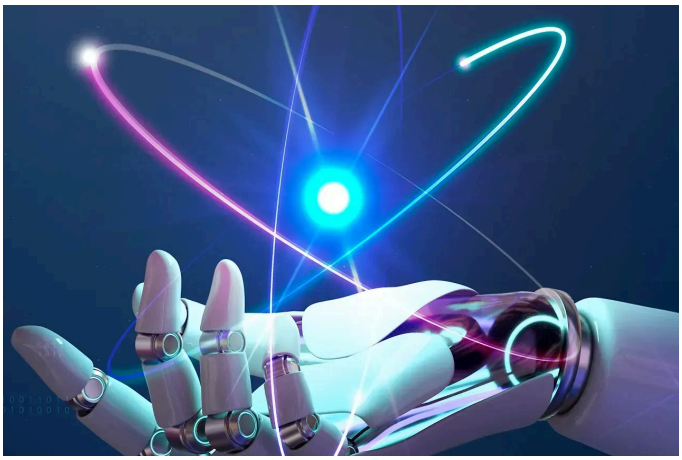


JENKS SCIENCE AND TECH TALKS

Jenks Science and Technology Forum discusses managing risks in emerging tech, plus quantum computers

By Ron Latanisian In September, Michael Garjian spoke about An Alternative to Corporate Capitalism in Managing the Socio-economic Risks of Emerging Technologies and Jagadeesh Moodera spoke about The Evolution of Quantum Computers An Alternative to Corporate Capitalism The introduction of any new technology into the marketplace and into our social

SPECIAL TO THE NEWS
October 5, 2025



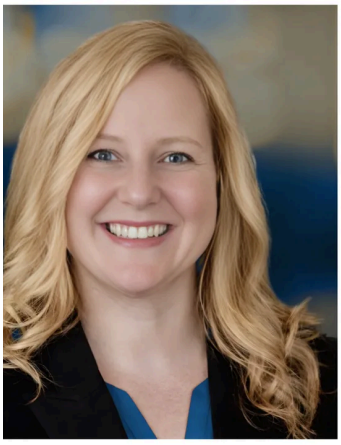
JENKS SCIENCE AND TECH TALKS

Jenks forum discusses a mystery and aviation hydrogen

In January MIT's Professor Srinivasan Chandrasekar spoke about the forerunner of modern toughened glasses, and Dr. Albert Moussa addressed hydrogen in aviation at the David Wilson Science and Technology Forum. By Ron Latanision, John Brown, and Walter Hubbard Prince Rupert's Drops: 400-year-old Mystery Revealed On February 14, Professor

SPECIAL TO THE NEWS
March 4, 2025

Latest



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NEWS

Winchester School Committee candidates bring contrasting backgrounds to Thursday forum

Two candidates for Winchester's School Committee will face voters at a forum as the district navigates a new literacy curriculum, budget pressures and questions about student mental health. Heather von Mering and John Bellaire are competing for an open seat on the School Committee, which oversees a budget von

WILL DOWD | STAFF WRITER

March 4, 2026

FEATURES

'Chicago: Teen Edition' dances onto the Winchester High School stage

By Talia Ho | Correspondent Fame. Fortune. And all that jazz. This spring, Winchester High School presents "Chicago: Teen Edition," a bold musical that explores celebrity culture, media manipulation, and the cost of ambition. Set in the 1920s, this iconic production is sure to leave the audience wanting more. Performances will

SPECIAL TO THE NEWS

March 4, 2026

EVENTS

Ripley Chapel in Winchester presents 'Syldason: You Are Welcome Here'

The following was submitted by the Ripley Chapel at First Congregational Church: On Friday, March 13, beginning at 7:30 p.m., live in-person and live streamed from the stunning Ripley Chapel at First Congregational Church, Winchester, 21 Church St., join in with Syldason, a duo concert featuring Sylvie Zakarian,

March 4, 2026

NEWS

Rep. Michael Day helps House colleagues pass sweeping energy affordability bill

The following was submitted by the Office of Rep. Michael S. Day: Rep. Michael S. Day and his colleagues in the House of Representatives recently passed energy affordability legislation that would result in over $9 billion in savings for utility ratepayers over the next 10 years. The bill maintains critical

March 4, 2026

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